

**REMARKS/ARGUMENTS**

Claims 35-58, 60-68 and 70 stand allowed, with claims 35 and 36 objected to in the outstanding Official Action. Applicants have amended claims 35-39 and 45-47 and therefore claims 35-58, 60-68 and 70 remain in the application.

The indication of allowable subject matter in claims 35-58, 60-68 and 70 is very much appreciated. The Examiner objects to a number of aspects in claims 35 and 36 allegedly indicating a lack of antecedent basis. The Examiner's attention is directed to the Manual of Patent Examining Procedure (MPEP) Section 2173.05(e) entitled "lack of antecedent basis." Specifically, the Examiner's attention is directed to the last sentence in the first paragraph which reads as follows:

"Inherent components of elements recited have antecedent basis in the recitation of the components themselves. For example, the limitation 'the outer surface of said sphere' would not require an antecedent recitation that the sphere has an outer surface."

Each of the alleged changes suggested by the Examiner in claim 35 has inherent antecedent basis in the recitation of the claims, i.e., "the relative amounts" has antecedent basis in "different chemical elements E<sub>1</sub> to E<sub>n</sub>." Inherently there are going to be chemical elements in varying amounts - the relative amounts has clear antecedent basis.

Similarly, "the chemical composition" has antecedent basis which is inherent in the "crystalline semiconductor material." All semiconductor materials have a chemical composition. There is simply no need to recite *in haec verba* that the semiconductor material has a chemical composition so that there is literal antecedent basis for the recitation of "the chemical composition." A similar argument is made with respect to each of the other Examiner suggested corrections.

The antecedent basis for each of the terms objected to by the Examiner would be clearly obvious to those having ordinary skill in the art, and it is this person to whom the claims must be directed. Therefore, the Examiner's objection to claims 35 and 36 based upon alleged lack of antecedent basis is respectfully traversed.

However, the above amendments, as proposed by the Examiner, obviates the need for explicit antecedent basis and do not appear to limit the scope of Applicants' claims in any fashion. Accordingly, Applicants have amended claim 35 as suggested by the Examiner.

With respect to claim 36, the Examiner suggests that "diffracted energy" does not have antecedent basis. Actually the phrase "diffracted radiation" does have antecedent basis in claim 35, from which claim 36 depends. As a result, Applicants have amended claim 36 and other similar claims to recite "diffracted radiation" instead of "diffracted energy" as set out in claim 36.

Applicants have also noted that there are a number of instances in which, like claim 36, there are references to "the or each or some of said diffraction peaks, or the or each or some of said portions of said diffracted radiation" which could be objected to in the future. To avoid any such future rejection, Applicants have simplified this language to read "at least some of said portions of said diffracted radiation" which will be understood by those of ordinary skill to indicate the same thing as "the or each or some of said diffraction peaks, or the or each or some of said portions of said diffracted radiation." The other claims containing similar language have also been corrected.

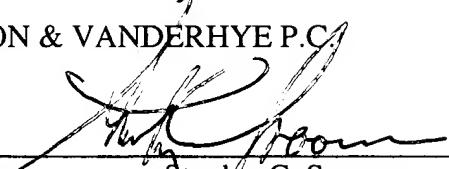
Having responded to all objections and rejections set forth in the outstanding Official Action, claims 35-58, 60-68 and 70 are in condition for allowance and notice to that effect is respectfully solicited. In the event the Examiner is of the opinion that a brief telephone or

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personal interview will facilitate allowance of one or more of the above claims, he is respectfully requested to contact Applicants' undersigned representative.

Respectfully submitted,

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